

REMARKS

In the present Amendment, new claims 11-13 have been added. Section 112 support for claims 11-12 may be found, for example, at page 44, last full paragraph of the specification. Support for new claim 13 may be found, for example, at page 46, lines 1-4 and page 49, lines 8-18 of the specification. No new matter has been added, and entry of the Amendment is respectfully requested.

Upon entry of the Amendment, claims 1-4 and 6-13 will be pending.

In Paragraph No. 2 of the final Office Action mailed March 7, 2006, claims 1-4 and 6-10 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Aoai et al (EP 1243968).

Applicant submits that this rejection should be withdrawn because Aoai et al EP '968 does not disclose or render obvious the positive resist composition of the present invention.

As an initial matter, Aoai et al does not render prima facie obvious the positive resist composition of the present invention. Aoai et al does not disclose, or fairly suggest, the positive resist composition of the invention.

In the Advisory Action mailed July 26, 2006, the Office maintains the position, based on the "broadest teachings" of Aoai et al, that "one of ordinary skill in the art would have been motivated to prepare a triphenylsulfonium compound having a hydroxyl group on one ring." Applicant strongly disagrees. Aoai et al in formula (PAG4) at [0057] discloses a very broad genus of sulfonium salts, which does not disclose or fairly suggest the specific compounds employed in the present invention. Of the triphenyl sulfonium salts disclosed by Aoai, none of

them have a hydroxyl substituent. Applicant does not believe there is anything in Aoai et al which would motivate a person of ordinary skill in the art to employ a hydroxyl group on one of the aryl groups of a triphenyl sulfonium salt. The only salts which are substituted with a hydroxyl group in Aoai et al are not triphenyl sulfonium salts. See compounds (PAG4-10) - (PAG4-16) cited by the Examiner. If anything, the disclosure of hydroxyl group substituents only on compounds other than triphenyl sulfonium salts would tend to lead a person of ordinary skill away from employing a hydroxyl group as a substituent on a triphenyl sulfonium salt.

Even if a prima facie case of obviousness could be established based on Aoai et al, which it cannot, the positive resist composition of the present invention provides unexpectedly superior results which rebut any prima facie case of obviousness and confirm the patentability of the present invention.

The evidence of record is discussed in detail at pages 5-6 of the Amendment Under 37 CFR 1.116 filed June 7, 2006. This evidence was also reviewed with the Examiner at the Examiner Interview on July 20, 2006.

In the Advisory Action mailed July 26, 2006, the Examiner expresses the concern that the inventive sample relied upon is not commensurate in scope with the present claims:

The examiner has considered the results of inventive resin I and comparative resin I wherein the sole difference between the two resins is the PAG (see tables on pages 81 and 84). The PAG in the inventive sample, I-1, comprises an aryl group with a hydroxyl group as well as two methyl groups. It is noted that the broadest claim limitation (claim 1) simply requires that there be a hydroxyl group present on one phenyl ring as no Ra1 group is required to be present given that l, m, and n may be zero. The presence of two additional groups on one ring with the hydroxyl group is a preferred embodiment, as disclosed in the last paragraph on page

44, where it is taught that preferred Ra1 groups are alkyl and alkoxy, most preferably alkyl. Therefore, the sample is not commensurate in scope with the instant claims, thus the evidence is not persuasive.

In response, Applicant (Mr. Kunihiro Kodama) submits a Declaration Under 37 CFR 1.132 providing additional comparative evidence. This evidence addresses the Examiner's concern and further demonstrates the unexpected superiority and patentability of the present invention over Aoi et al.

As Mr. Kodama reports in his Declaration, an "Example A" of the invention was prepared in the same manner as Example 1 of the present application, except that the acid generator was changed to PAG-X, which has only a single hydroxyl group as a substituent on one phenyl ring. The structure of PAG-X is shown at page 2 of Mr. Kodama's Declaration.

In addition, "Example B" of the invention was prepared in the same manner as Example 1 of the present application, except that the acid generator was changed to acid generator I-10, which has only a hydroxyl group as a substituent on each of the three phenyl rings. Again, the Examiner will kindly refer to page 2 of Mr. Kodama's Declaration for the structure of PAG I-10.

As a Comparative Example, Comparative Example 1 from the present specification, using PAG-A as the acid generator, was employed. See page 2 of Mr. Kodama's Declaration for the structure of PAG-A. As the Examiner is aware, PAG-A is the same as PAG 4-3 used in the working Examples of Aoi et al. See page 5 of the Amendment filed June 7, 2006 for a detailed discussion of the point.

Using these three samples (i.e., Examples A and B and Comparative Example 1, as described above), positive resist solutions were prepared in accordance with the description at

page 80 of the present specification. The resist solutions were spin coated and evaluated in the same manner as described at pages 83 and 84 of the present specification. See page 2 of Mr. Kodama's Declaration.

The results are shown in the Table on page 3 of Mr. Kodama's Declaration. As shown there, the number of development defects was reduced dramatically by using a triphenylsulfonium salt having a hydroxyl group on a phenyl group, instead of a triphenylsulfonium salt having no hydroxyl group. The number of development defects for Examples A and B of the invention was 59 and 54, respectively, whereas the number of development defects for the Comparative Example was 4800. There is nothing in Aoi et al which would lead a person of ordinary skill in the art to expect the superior results obtained with the positive resist composition of the present invention.

In view of the above, reconsideration and withdrawal of the section 103 rejection of claims 1-4 and 6-10 based on Aoi et al EP '968 are respectfully requested.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.114(c)
U.S. Appln. No.: 10/806,451

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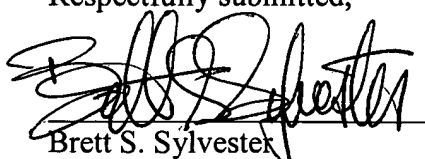
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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brett S. Sylvester", written over a horizontal line.

Brett S. Sylvester
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Date: September 7, 2006